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# AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

 (Currently Amended) A method of operation within a data processing system, the method comprising:

before receiving a request to execute a first function, registering an association between the first function and a second function that returns data type information for the first function;

receiving a request to execute the first function to return data from a source; and in response to receiving the request to execute the first function, performing the steps of: executing the second function to obtain the data type information that specifies one or more data types of result data that should be returned for the first function.

registering the data type information;

executing the first function to obtain the result data;

storing the result data obtained from the source in a format that reflects the data type information from the second function; and

returning the result data as data having the one or more data types.

#### 2-3. (Canceled)

- 4. (Previously Presented) The method of claim 1 further comprising determining that the source is associated with the request by determining whether a certain keyword is specified as a data return type for the first function.
- (Previously Presented) The method of claim 1 further comprising determining that the source is associated with the request by determining whether the first function returns data in an array of data elements.

6-8. (Canceled)

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9. (Previously Presented) The method of claim 1 wherein the data type information indicates an arrangement of rows and columns of a database table and wherein storing the result data obtained from the source in a format that reflects the data type information comprises tabulating the result data according to the arrangement of rows and columns.

# 10-15. (Canceled)

16. (Currently Amended) A system comprising:

a processing entity; and

a memory coupled to the processing entity and having program code stored therein which, when executed by the processing entity, causes the processing entity to:

before receiving a request to execute a first function, register an association between the first function and a second function that returns data type information for the first function:

receive a request to execute the first function included in the program code to return data from a source; and

in response to receiving the request to execute the first function, performing the steps of:

executing the second function to obtain data type information that specifies one or

more data types of result data that should be returned returned for the first
function:

registering the data type information;

executing the first function to the obtain result data,

storing the result data obtained from the source in a format that reflects the data type information from the second function; and

returning the result data as data having the one or more data types.

## 17-21. (Canceled)

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 (Currently Amended) A computer-readable <u>storage</u> medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to:

before receiving a request to execute a first function, register an association between the first function and a second function that returns data type information for the first function;

receive a request to execute the first function to return data from a source; and in response to receiving the request to execute the first function, performing the steps of:

executing the second function to obtain data type information that specifies one or more data types of result data that should be returned for the first function:

registering the data type information;

executing the first function to obtain the result data.

storing the result data obtained from the source in a format that reflects the data type information from the second function; and

returning the result data as data having the one or more data types.

## 23-24. (Canceled)

- (Previously Presented) The method of claim 1 wherein the registered data type information is used to type-check the first function.
- 26. (Currently Amended) The computer readable <u>storage</u> medium of claim 22 further comprising determining that the source is associated with the request by determining whether a certain keyword is specified as a data return type for the first function.
- (Currently Amended) The computer readable <u>storage</u> medium of claim 22 further
  comprising determining that the source is associated with the request by determining
  whether the first function returns data in an array of data elements.

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28. (Currently Amended) The computer readable <u>storage</u> medium of claim 22 wherein the data type information indicates an arrangement of rows and columns of a database table and wherein storing the result data obtained from the source in a format that reflects the data type information comprises tabulating the result data according to the arrangement of rows and columns.

(Canceled)

 (Currently Amended) The computer readable <u>storage</u> medium of claim 22 wherein the registered data type information is used to type-check the first function.

31-34. (Canceled)

35. (New) The system of claim 16 further comprising determining that the source is associated with the request by determining whether a certain keyword is specified as a data return type for the first function.

36. (New) The system of claim 16 further comprising determining that the source is associated with the request by determining whether the first function returns data in an array of data elements.

37. (New) The system of claim 16 wherein the data type information indicates an arrangement of rows and columns of a database table and wherein storing the result data obtained from the source in a format that reflects the data type information comprises tabulating the result data according to the arrangement of rows and columns.

 (New) The system of claim 16 wherein the registered data type information is used to type-check the first function.

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